

Introduction to

INFORMATION TECHNOLOGY



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Preface

Overview

This module aimed primarily for students who will be taking subject Introduction to Information Technology from Faculty of Information and Communication Technology, Universiti Teknikal Malaysia Melaka (UTeM). It provides the students with introduction to the computer with the basic application software including: MS Word, MS Excel, MS Access, MS Power Point, Adobe Photoshop and Adobe Dreamweaver. The hands-on practice is to equip the students with a basic range of skills required for using computer applications.

Chapter Layout

Each chapter begins with a list of objectives. These include the important concepts to be mastered within the chapter. Extensive self-review questions are included at the end of chapter for self study. They provide the student with a chance to build confidence with the lab exercises. This module contains 12 chapters includes Chapter 1: Introduction to Computer and Microsoft XP, Chapter 2: Web Browser – Internet Explorer, Chapter 3: Using the eFTMK Website, Chapter 4: Word Processing Software – MS Word Part I, Chapter 5: Word Processing Software – MS Word Part II, Chapter 6: Spreadsheet Software – MS Excel Part I, Chapter 7: Spreadsheet Software – MS Excel Part II, Chapter 8: Presentation Program – MS Power Point, Chapter 9: Database Management System – MS Access, Chapter 10: Photo Editing Software – Adobe Photoshop, Chapter 11: Hypertext Markup Language (HTML) and Chapter 12: WYSISYG HTML Editor – Adobe Dreamweaver

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DEDICATION

I would like to dedicate this book to my beloved husband Nor Rizal and my daughters Nor Wajahah and Nor Nabihah.

To my parents Md.Shah Abd Hamid and Rosnah Mohd Noor, thank you fore being there.

- Wahidah Md. Shah

To my beloved wife Elia Erwani Hassan for her love and inspiration.

To my little cute sweethearts Muhammad Adeeb Amsyar and Nur Aeen Insyirah for their love.

To my parents Bahaman Kaba and Saoma Zakaria, thanks for everything

- Nazrulazhar Bahaman

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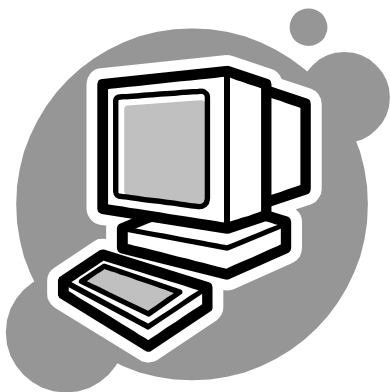
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What You Will Learn

By the end of this section of the practical, the students should be able to:

- Identify computer components (hardware) visually
- Assemble a packaged personal computer (external assembly)
- Identify the features of Windows XP environment
- Manage files properly using Windows Explorer



Chapter 1

Introduction to Computers and Microsoft XP

1 Introduction

A computer is a machine for manipulating data according to a list of instructions. Computers take numerous physical forms. Early electronic computers were the size of a large room, consuming as much power as several hundred modern personal computers. In this lab session we will look at commonly found hardware in commercially available packaged personal computers in the market.

The Windows XP environment is a bit different from the previous versions of windows, so it is important to be able to identify the new features in Windows XP. In this lab session you will also be taught to use Windows Explorer to manage files and folders in your computer so that you will not misplace your files in the computer.

1.1 Computer Hardware

Computer Hardware is classified into five main components – Input device, Output device, Communication device, System Unit (Processor and Memory) and Mass Storage.

1.1.1 Input Device

An input device is a hardware which is a mechanism that transforms information in the external world for consumption by a computer. Often, input devices are under direct control by a human user, who uses them to communicate commands or other information to be processed by the computer, which may then transmit feedback to the user through an output device. Input and output devices together make up the hardware interface between a computer and the user or external world.

i. Keyboard

A **computer keyboard** is a peripheral partially modeled after the typewriter keyboard. Keyboards are designed for the input of text and characters and also to control the operation of a computer. Computer keyboards are an arrangement of rectangular or *near-rectangular* buttons, or "keys". Keyboards typically have characters engraved or printed on the keys; in most cases, each press of a key corresponds to a single written symbol. However, to produce some symbols requires pressing and holding several keys simultaneously or in sequence; other keys do not produce any symbol, but instead affect the operation of the computer or the keyboard itself.

How to write:

1. in capital letters? e.g. M, O, P
2. a symbols? E.g. *, &, ^, @, ~



ii. Mouse

In computing, a **mouse** (plural **mice** or **mouses**) functions as a pointing device by detecting two-dimensional motion relative to its supporting surface. Physically, a mouse consists of a small case, held under one of the user's hands, with one or more buttons. It sometimes features other elements, such as "wheels", which allow the user to perform various system-dependent operations, or extra buttons or features can add more control or dimensional input. The mouse's motion typically translates into the motion of a pointer on a display.

There are three types of ports to connect a mouse to the CPU casing:

- PS/2 port
- Serial port
- USB port

What kind of mouse that you are using?



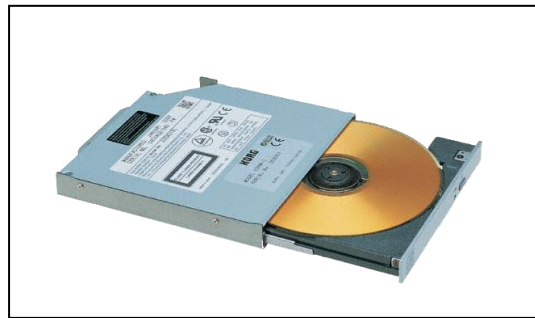
iii. Floppy Drive

A floppy disk is a data storage device that is composed of a disk of thin, flexible ("floppy") magnetic storage medium encased in a square or rectangular plastic shell. Floppy disks are read and written by a floppy disk **drive or FDD**, the initials of which should not be confused with "fixed disk drive", which is another term for a hard disk drive. To store data into a 3 1/4 floppy disk, also known as a diskette. The maximum file size to store is 1.44MB.



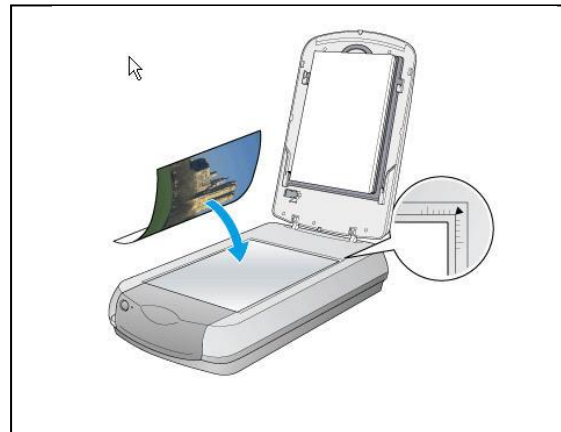
iv. CD Drive

CD-ROM drives, which today typically means a CD-RW drive that is a combo CD-ROM, CD-R and CD-RW drive, come in a variety of speeds. The original drive (1x) transferred data at 150KB per second. By doubling the spindle speed (RPMs) for 2x drives, the transfer rate increased to 300KB/sec and has been increasing ever since. A device that holds and reads CD-ROM discs. CD-ROM drives generally also play audio CD discs by sending analog sound to the sound card via a 4-pin cable



v. Scanner

Scanner is an optical device that reads a printed page or transparency and converts it into a graphics image for the computer. The scanner does not recognize or differentiate in any manner the content of the material it is scanning. Everything is converted into a formatted image, which is a pattern of dots.



vi. Microphone

A **microphone** sometimes referred to as a **mike** or **mic** is an acoustic to electric transducer or sensor that converts sound into an electrical signal. We can record sounds (ex: our voice) into the computer using a microphone:



1.12 Output Device

An output device is any hardware used to communicate the result of data processing carried out by the user or CPU.

i. Computer Display Monitor

A computer display monitor, usually called simply a monitor, is a piece of electrical equipment which displays viewable images generated by a computer without producing a permanent record. A computer display device is usually either a cathode ray tube or some form of flat panel such as a TFT LCD display. The monitor comprises the display device, circuitry to generate a picture from electronic signals sent by the computer, and an enclosure or case. Within the computer, either as an integral part or a plugged-in interface, there is circuitry to convert internal data to a format compatible with a monitor. Visual Display Unit is the most commonly used output device.



ii. Computer Speaker

Computer speakers range widely in quality and in price. Typically, the computer speakers packaged with computer systems are both small and simple. There are also advanced forms of computer speakers that have graphic equalization features (bass, treble, etc.) and sometimes built-in amplifiers



iii. Computer Printer

A computer printer, or more commonly a printer, produces a hard copy (permanent human-readable text and/or graphics) of documents stored in electronic form, usually on physical print media such as paper or transparencies. Many printers are primarily used as computer peripherals, and are permanently attached by a printer cable to a computer which serves as a document source. Other printers, commonly known as network printers, have built-in network interfaces (typically wireless or Ethernet), and can serve as a hardcopy device for any user on the network. There are many types of printers, such as Bubble Jet printers and Laser Jet printer.



Note:



All hardware needs a device driver (installed) in order for it to be able to be used with the computer system. A device driver or software driver is any computer program that allows other programs to interact with a computer hardware device, or else to work as if they are interacting with a particular device.

1.2 Windows XP

The most distinct feature of Windows XP is it has a simplified look, and a better-looking graphical user interface (GUI).

1. First, start your computer by pressing the power button (once only).
2. Windows will start up, wait until you see the login screen
3. Choose "student" by clicking on it, and enter the password "student"
4. This is an example of a typical Windows XP environment called desktop.

1.2.1 Desktop



The desktop is your work area. There are a number of things to notice about the Desktop. By default, there are little pictures on it. The pictures are called icons.

To get some practice with using your mouse,

1. Click on one of the icons. Click on them with your Left mouse button, a Single Click. You should notice that the icons change colour to blue. That is meaning, the icon is said to be selected.
2. Now click on any of your icons with the Right mouse button, again a Single Click. You should see a menu popping up with a list of items on it. The menu pops up because of that Right Click - the Right click is usually a shortcut click. Each icon is associated with a programme on your computer.
3. Now try to double click each icon with the Left mouse button and see what happens. You should find that some sort of software, or programme is launched.

So the desktop icons are shortcuts to your programmes.

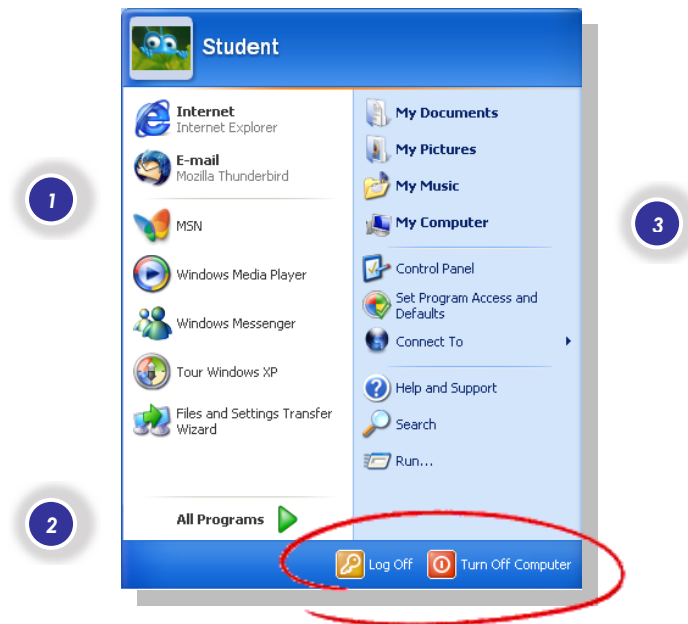
1.2.2 Taskbar

By default, the taskbar is located on the bottom edge of the desktop. You can click the taskbar and drag it to other locations. The Start button, active program buttons, icons for quick access to programs, and the current time are located on the taskbar.

1.23 Start Button



Click your Start button once with your Left hand mouse button. What you will see is a menu popping up as shown in figure below



Notice the name "**Student**" next to the image. Yours will show the name you typed when setting up Windows XP.

The menu bar is split into three sections.

1

The first section, the white one on the left, has seven items in it. The items under this area are shortcut to recently used programmes. These will change as you start up and close down software packages. Yours will probably be different items. One Single click with the Left mouse button on any of these items will launch some software.

2

The second section has just one item in it: **All Programs**. There is a green arrow next to this text. Clicking on the green arrow will bring up menu where you can find all the software installed on your computer.

3

The third section on the right of the Start menu, the one in pale blue, is for special areas of your computer, and shortcuts to folders and files that are used frequently. You can also get help here, and search your computer for files and folders.

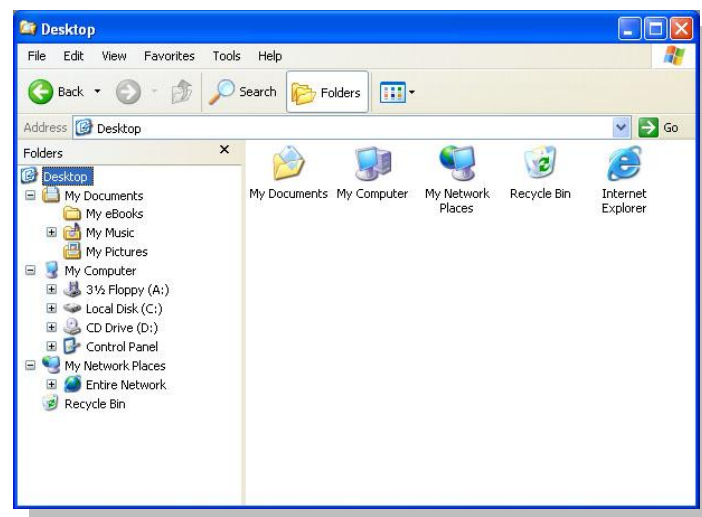
At the bottom of the start menu are two buttons (red circle), one for logging off and one for closing down your computer. There is a difference between the two, but the one you'll probably want when it comes to turning off your computer is Shut Down. Clicking it once with your Left mouse button will give you this pop up box, called a dialogue box.

The dialogue box is giving you four options. Click the second option "Turn Off" with your left mouse button, a Single Click, if you want to completely close down your computer. The other popular option is "Restart". If you change your mind, click the Cancel button at the bottom. The dialogue box will disappear.



1.24 Windows Explorer

Windows Explorer is a utility program for managing files in your computer. It enables you to view folders in your computer hierarchically (tree view). You can expand the tree in the left hand view, click on a folder and the contents of that folder are displayed in the area on the right side.



i. Files and folders

A **file** is an electronic document in a computer while a **folder** is a storage area where the files are stored. A good practice in managing your files is to store files in different folders accordingly (category, usage, functionality). You could also create sub folders in a folder.

ii. Creating a new folder on the desktop

1. Now go to your desktop.
2. Right click on your mouse.
3. Click on "New" to get the following menu.
4. Click on "Folder to create a new folder on the desktop.
5. Now type "my first folder" as the folder's name.

iii. Renaming a folder:

1. Right click on the folder you want to rename.
2. A pop up menu will appear.
3. Click on "Rename"
4. Type in a new name for the folder.
5. Hit "Enter" on your keyboard.

Note:



The same technique is used to change a filename

iv. Deleting a file or folder:

There are a few ways to delete a folder:

1. **First**, Right click on the folder you wish to remove/delete, then click on "Delete" in the pop-up menu
2. **Second**, click on the folder you wish to remove, and then hit the "Enter" key on your keyboard.
3. **Third**, click on the folder you wish to remove, and then click "File" in the Windows Explorer menu bar, then click "Delete" in the drop-down menu.
4. **Fourth**, Click on the folder you wish to remove, then click "Edit" in the Windows Explorer menu bar, then click "Cut" in the drop-down menu.

Note:



- Same techniques are used to remove a file.
- The files or folders deleted will be stored in the "Recycle Bin". You may restore the file (or folder) if you accidentally delete it. And you may delete the file (or folder) from the recycle bin to remove the file (or folder) permanently.

v. Moving a file or folder:

There are **three** ways to move a file or folder:

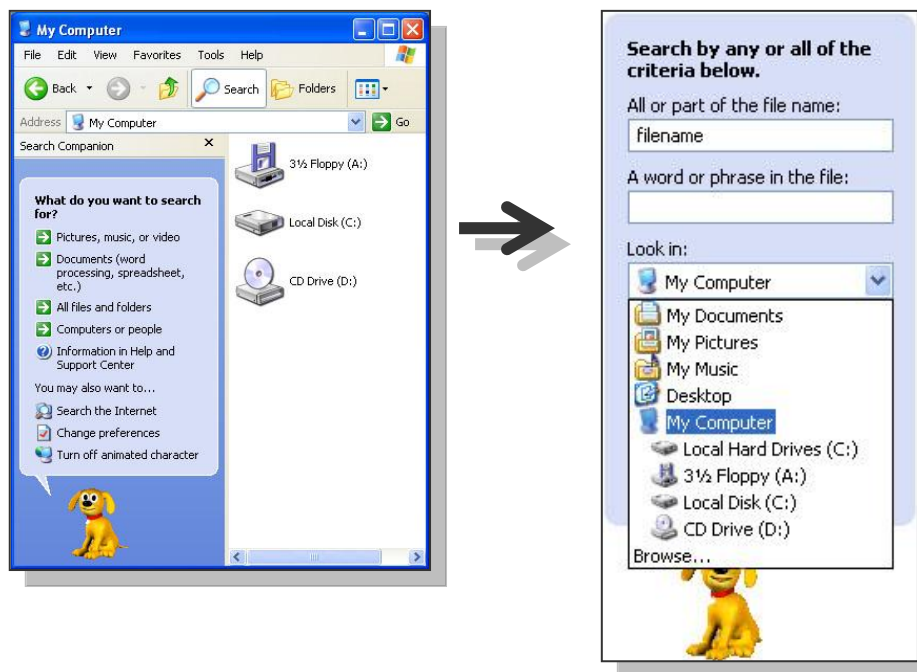
1. **First**, Right click on the folder to move, click on "Cut" in the popup menu. Click on the destination folder. Now right click and click on "Paste" in the popup menu.
2. **Second**, Click on the folder to move. Then click on "Edit" on the menu bar, and click on "Cut" on the drop down menu. Click on the destination folder. Now click on "Edit" again, and click on "Paste" in the drop down menu.
3. **Third**, Click on the folder to move, then press both "Ctrl" and "X" [Ctrl+X] on your keyboard at the same time. Click on the destination folder. Now press both "Ctrl" and "V" [Ctrl+V] at the same time.

vi. Copying a file or folder:

There are **three** ways to move a file or folder:

1. **First**, Right click on the folder to copy, click on "Copy" in the popup menu. Click on the destination folder. Now right click and click on "Paste" in the popup menu.
2. **Second**, Click on the folder to copy. Then click on "Edit" on the menu bar, and click on "Copy" on the drop down menu. Click on the destination folder. Now click on "Edit" again, and click on "Paste" in the drop down menu.
3. **Third**, Click on the folder to copy, then press both "Ctrl" and "C" [Ctrl+C] on your keyboard at the same time. Click on the destination folder. Now press both "Ctrl" and "V" [Ctrl+V] at the same time.

vii. Searching for a file or folder:



1. Click on "Search" on the Toolbar.
2. The windows assistant will appear with the search function.
3. Choose what you want to search.
4. Key in the filename (or folder name) you wish to search. And choose a location to search the file.
5. Click on search.
6. The possible matches will be displayed in the right hand side of windows explorer.

Note:



You may customize your search, find out how much you could customize. Try searching for image files in your computer.



Self-Review Questions

1. Classify each computer components you have reviewed earlier.
 - i. Printer
 - ii. Scanner
 - iii. Floppy diskette
 - iv. CPU
 - v. Monitor
 - vi. Keyboard
 - vii. Mouse
 - viii. Joystick
 - ix. Speaker
 - x. Pen drive

2. What is the difference between moving a folder and copying a folder?

3. List at least five (5) shortcut keys you have learnt (or discovered!).

4. What are the differences between CD-R and CD-RW.

5. What are file and folder?
6. What is the use of Log Off button?

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